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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,756	04/09/2001	Soumitra Sarkar	RSW9-2000-0179-US1	6494

7590 06/02/2004

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EXAMINER

BULLOCK JR, LEWIS ALEXANDER

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/828,756	Applicant(s) SARKAR ET AL.	
	Examiner Lewis A. Bullock, Jr.	Art Unit 2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,6,7,12,13 and 18 is/are rejected.
- 7) ☒ Claim(s) 2-5,8-11 and 14-17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Allowable Subject Matter

1. Claims 2-5,8-11 and 14-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
2. The following is a statement of reasons for the indication of allowable subject matter: The claims are allowable for at least the following reason: All of the cited claims have allowable subject matter indicates how the single machine having multiple instances of the same software program elects a supervisor program instance. The cited election is performed by allowing each instance to establish a TCP socket and attempt to create a binding between its TCP socket and a supervisor port number of the TCP/IP stack; and designating the software instance which succeeds in creating the binding as the supervisor program. By using the cited election algorithm, the inventor achieve simple administration and coordination of multiple copies of the same program on a single machine, and also facilitates quick and efficient handling of situations in which any of the programs fail, i.e. the supervisor program fails, all of the remaining subordinate programs immediately begin the election of a new supervisor and if one of the subordinate programs fails, the supervisor immediately removes the failed subordinate program from the registry so that failed attempts to communicate with the failed subordinate program do not occur. The preferred embodiment therefore addresses the problems of supervisor election and failure detection in an optimally efficient way, when multiple copies of a program execute within the context of a single

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machine. The election protocol requires no network-style broadcast flows, but depends instead on a basic (and universal) feature of all TCP/IP stacks that allow one socket in any process to bind to a given port number. The cited prior art of record does not teach the cited election wherein each instance attempts to create a binding between its TCP socket and a supervisor port number of the TCP/IP stack and designating the software instance which succeeds in creating the binding as the supervisor program. The prior art of record at best teaches designating by a user which instance is the master or supervisor program and which instances are the subordinate programs. Therefore, the prior art of record do not achieve the cited advantages that Applicant's invention acquires and the claims have allowable subject matter over the prior art of record.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it exceeds 150 words.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 6, 7, 12, 13 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by THORNE (U.S. Patent 6,047,289).

As to claim 1, THORNE teaches a method for coordinating multiple instances of the same software program (plurality of objects) residing on a single machine (computer system) (col. 2, line 59 – col. 3, line 6; col. 9, lines 22-34), comprising the steps of: electing one of the software instances as a supervisor program (master object), thereby designating the remainder of the software instances as subordinate programs (slave objects) (via building attributes into the objects wherein one is designating to be identified as the master object and the objects wherein one is designating to be identified as the slave objects) (col. 9, lines 22-60; col. 15, line 37 – col. 17, line 48; col. 18, lines 1-22); establishing communication connections (via the propagation agent) between the supervisor program (master object) and each of the subordinate programs (slave objects) (col. 10, line 52 – col. 12, line 24); and coordinating all of the software instances by having the supervisor program (master object) monitor and control all operations of the subordinate programs (slave objects) which require coordination via the communication connections (col. 10, line 52 – col. 12, line 24).

As to claim 6, THORNE teaches creating a registry (slaves attribute), within the supervisor process (master object), containing a unique entry (names) for each software instance residing on the machine (each registered slave) (col. 9, lines 40-60).

As to claims 7 and 12, reference is made to a computer readable program product that corresponds to the method of claims 1 and 6 and is therefore met by the rejections to claims 1 and 6 above.

As to claims 13 and 18, reference is made to a system that corresponds to the method of claims 1 and 6 and is therefore met by the rejection of claims 1 and 6 above.

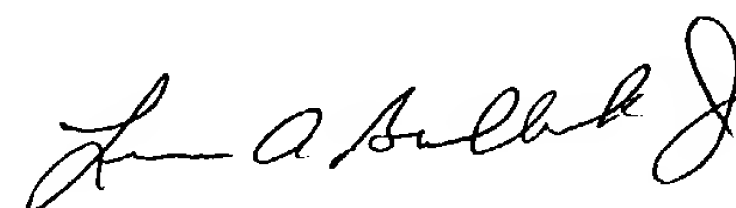
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (703) 305-0439. The examiner can normally be reached on Monday-Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2126

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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